

However, while claim 1 recites and claims an apparatus for **mounting** a connector to a tray, figure 2 of *Milan* does not disclose an apparatus for the mounting of a connector to a tray; it discloses the **internal structure** of a connector (see *Milan*: Col. 5, lines 32-55; Abstract). Furthermore, claim 1 specifically recites an apparatus for mounting a connector **to a tray**. There is no tray present in *Milan*.

In paragraph 6 of the Office Action, the Office responds to Applicants' previously submitted arguments. The Office first disputes Applicants' statement that "Figure 2 of *Milan* does not disclose an apparatus for the mounting of a connector" by stating that "Figure 2 does show 20 is mounting on 24, 24 is mounting on 26, 26 is mounting on 25." However, Applicant asserts that the Office mischaracterizes *Milan*. Element 20 of *Milan* is an "elastomeric conductor," element 24 is a "compression stop plate," element 26 is a "PC board," and element 25 is a "floating spring board block." In *Milan*, a single connector is created by assembling the above-referenced pieces together. Thus, *Milan* does not describe a **mounting**, but rather describes an **assembling** of a single connector. Assembling a connector by placing an elastomeric conductor on a "compression stop plate" can not anticipate the "apparatus for mounting a connector to a tray," as recited in claim 1. The same is true for the "mounting" of a "compression stop plate" on a "PC board" or the "mounting" of "a PC board" on a "floating spring board block." Applicants assert that a publication disclosing the internal structure of a single connector and a method of assembling the connector cannot anticipate a claim regarding an apparatus for the mounting of a connector.

In paragraph 9 of the Office Action, the Office states that "there is no requirement that a motivation to make the motivation be expressly articulated." Applicants respectfully refer to MPEP § 2143 which states, "there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." It would not have been obvious for one skilled in the art to use *Milan* because *Milan* is specific to the internal structure of a single connector used to interconnect two circuit boards (see Col. 5, lines 33-36). One designing an apparatus for mounting a connector to a tray would have no motivation to refer to a connector used to interconnect two circuit boards.

In addition, MPEP § 2111.02 states, "if a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim." However, the structure described in *Milan* is not capable of performing the function described in the preamble of claim 1 of the present application, as *Milan* discloses the internal structure of a connector and not an apparatus for mounting a connector. Thus, the structure described in *Milan* is incapable of "mounting a connector to a tray," as recited in claim 1 and cannot anticipate the present invention.

Therefore, Applicants assert that claim 1 is patentable over the cited references and respectfully request the removal of the rejection of claim 1.

As claims 2-19 variously depend from claim 1, Applicants assert that they are all patentable for the reasons set forth above.

Second Rejection

The Office rejected claims 20-21 under 35 U.S.C. § 102(b) as being anticipated by *Nations* (U.S. Patent 5,391,091, issued February 21, 1995). Applicants respectfully traverse this rejection.

Claim 20 recites, *inter alia*, a module comprising a connector and a first guide hole located in proximity to the connector. *Nations*, with reference to Figures 1 and 2, discloses a module (16) with a connector (2) and guide pins (6). *Nations* fails to show a module containing guide holes. The Office asserts that *Nations* discloses a module (14) with a connector (4) and a guide hole (38). However, it is clear that element 14 of *Nations* is a printed circuit board (see column 3, lines 63-65), not a module. It is further clear that *Nations* further discloses that element 16 is a module which is inserted into a receptacle (see column 3, lines 66-68). Thus, *Nations* discloses a module containing guide pins to be inserted into a receptacle containing a printed circuit board containing guide holes. Such a layout is not recited in claims 20-21.

Therefore, *Nations* fails to disclose every element of claim 20. Applicant respectfully requests the removal of the rejection of claim 20 and claim 21, which depends from claim 20.



Third Rejection

The Office rejected claims 24-27 under 35 U.S.C. § 102(b) as being anticipated by *Bittihn et al.* (U.S. Patent 5,538,809, issued July 3, 1996). Applicants respectfully traverse this rejection.

The Office states that *Bittihn* discloses a method of providing a tray with a mating connector (12, 13, 14, 15, 16) coupled to the tray by at least one spring (18) and mounted between guide pins (11), inserting the module (not disclosed, but "inherent") into the tray until the first and second guide holes/pins mate with the first and second guide pins/holes such that the first connector is aligned with the mating connector by the spring.

Applicants assert that the Office mischaracterizes the *Bittihn* reference. As an initial matter, Applicants object to the finding that a module is "inherent" to *Bittihn*. In an earlier Office Action (dated May 9, 2001), the Office asserted that "*Bittihn*" lacks a module. In the most recent Office Action of January 29, 2002, the Office asserts that a module is inherent to *Bittihn*. Applicants assert that a module is not "inherent" to *Bittihn*. *Bittihn* discusses the sliding of a battery onto a charging apparatus through the use of a roller conveyer. The roller conveyer would be used to join the battery and the charging unit such that the battery can be charged. Such a device does not anticipate the insertion of a module into a tray, as disclosed in claims 24-27, as there is no module or tray present in *Bittihn*.

Therefore, *Bittihn* fails to disclose every element of claims 24-27. Applicant respectfully requests the removal of the rejection of claims 24-27.

Fourth rejection

During a telephonic conference, the Office also cited to *Rebaudo et al.* (U.S. Patent 4,470,100, issued September 4, 1984) against the present application. Applicants respectfully traverse this rejection.

Rebaudo refers to the connection of "opposite edges of a printed circuit board to connectors located on parallel side panels." (col. 1, lines 35-37). Connections are made by inserting a printed circuit board into a card cage and connecting the boards via connectors located on both sides of the circuit board. In contrast to the present



invention, *Rebaudo* discloses the insertion of module 14 between a pair of side panels 16, followed by the tightening of side panels around the module through the use of screws on the panels, as opposed to the insertion of a module into a tray. Thus the steps needed to insert the module of *Rebaudo* is very different from the claimed method of the present application.

Furthermore, the construction of the system of *Rebaudo* is different from the claimed system. For example, *Rebaudo* teaches the use of screws 52 and 54 which are spring biased to pull the mounting assembly outwards. (See col. 3, lines 54-68). This teaches against the present invention, which claims, *inter alia*, a spring mounted on a fastener. As disclosed from page 11, line 19 to page 12, line 2, the spring may serve to provide a force to push the connectors together, as opposed to pulling the module to the side panel.

Thus, Applicants assert that *Rebaudo* does not anticipate any of the claims of the present invention.

Objections

The Office objected to claim 16 as being dependent upon a rejected base claim, but indicated that claim 16 was otherwise allowable. While Applicant believes that the claims from which claim 16 depends are allowable for the reasons listed above, Applicants amend claim 16 to place the claim in independent form, for efficiency of prosecution. Applicants respectfully request the removal of this rejection of claim 16.

CONCLUSION

In view of the foregoing, Applicants believes that all of the pending claims fully comply with 35 U.S.C. § 112 and are allowable over the prior art of record. Therefore, reconsideration of the application and allowance of all pending claims is earnestly solicited. The Examiner is invited to telephone the undersigned at the number listed below to discuss any of the foregoing in greater detail or to otherwise expedite the prosecution of the application.

Respectfully submitted,

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MARKED UP VERSION SHOWING CHANGES MADE

Claim 16 was amended as follows:

16. (AMENDED) ~~The apparatus of claim 15, further comprising~~ An apparatus for mounting a connector to a tray comprising:

a rear plate of said tray, with a first rear hole and a second rear hole;

a first fastener mounted in said first rear hole;

a first spring mounted on said first fastener;

a mounting plate attached to the connector, said mounting plate comprising a first mounting hole and a second mounting hole;

a second fastener mounted in said second rear hole;

second spring mounted on said second rear hole;

a first guide pin; and

a second guide pin;

and wherein,

said first fastener comprises a first bolt;

said second fastener comprises a second bolt;

said mounting plate is mounted on said first and second bolts and said first and second springs, such that said first bolt is positioned through said first mounting hole;

said second bolt is positioned through said second mounting hole;

said first guide pin and second guide pin are each threaded; and

said first guide pin is threaded on said first bolt; and

said second guide pin is threaded on said second bolt; and wherein

said first guide pin and said second guide pin secure said mounting plate to said first bolt and said second bolt.

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